

4 VAC 25-125-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

"Bin" means a container for storage of bulk material.

"Bunker" means a vessel for the bulk storage of material; the lowermost portion is usually constructed in the form of a hopper.

"Chief" means the Chief of the Division of Mines of the Department of Mines, Minerals and Energy.

"Division" means the Division of Mines of the Department of Mines, Minerals and Energy.

"Hopper" means a vessel not primarily intended for storage into which materials are fed; usually constructed in the form of an inverted pyramid or cone terminating in an opening through which the material is discharged.

"Lifeline" means a component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

"Silo" means a tall structure, usually cylindrical and of reinforced concrete construction, in which bulk material is stored and discharged through feeders that draw materials from the bottom.

"Stockpile" means any accumulation of material formed to create a reserve for loading or other purposes.

4 VAC 25-125-20. General Provisions for Stockpiles with Underlying Feeders.

- A. Stockpile design and management shall be such that materials can be safely stored and handled.
- B. Stockpiles shall be maintained so as not to become unstable. Immediate action shall be taken to correct such conditions when encountered.
- C. Stockpile dumping locations shall be visually inspected prior to work commencing and as frequently as ground conditions warrant. Where there is evidence of ground failure at a stockpile dumping location, loads shall be dumped a safe distance back from the edge of the unstable area of the bank and pushed to the stockpile.
- D. Adequate illumination shall be provided for stockpile operations after dark. When visibility is inadequate, the operation of mobile equipment on piles shall be suspended until conditions permit adequate visibility.
- E. All employees who work on or around stockpiles shall be trained on potential hazards. Hazard training shall also be provided for anyone other than employees that perform work associated with stockpiles, including but not limited to maintenance personnel or contractors.
- F. Pre-shift examinations shall be conducted by a certified person, designated by the operator, for hazardous conditions at work areas involving stockpiles. The examiner shall visually inspect the areas for hazardous conditions to include: evidence of impending ground failure or unstable conditions, voids or bridges at draw off points, signs of slope instability, slumping on the slope, cracks along the crest of a pile, and bulging at the base of the pile.

4 VAC 25-125-30. Safety Precautions on Stockpiles with Underlying Feeders.

- A. Telephone or equivalent two-way communications shall be established between equipment operators working on stockpiles and those persons who are operating conveyors, feeders, hoppers or load out facilities drawing from those stockpiles. Communication shall be maintained in order to keep such equipment operators advised of the possibility of bridged material over a cavity in the stockpile. Contact shall be maintained with the equipment operators during draw down activities.
- B. No person shall travel on foot directly on areas of coal stockpiles where underlying feeders are in place, except on an emergency basis; and then only under direct supervision of a certified foreman and when secured by an overhead lifeline with feeders locked and tagged out.
- C. No person shall operate equipment on a coal stockpile directly over areas where underlying coal feeders are in place without a Stockpile Safety Plan approved by the Chief. The plan shall be submitted by the mine operator or agent and when approved, shall be posted at the mine site. The approved plan shall be reviewed with all affected persons prior to work being done, and a record maintained of such review.
- D. The plan shall outline procedures to protect the health and safety of mobile equipment operators working on a stockpile or coal storage area directly over areas where underlying coal feeders are in place: Plan procedures shall be approved and shall include:
 - (1) A method of determining that no miners or equipment are in the affected area before starting stockpile underlying feeders;
 - (2) A method of determining the expected draw hole size in correlation to the stockpile size shall be provided;
 - (3) Safe procedures for breaking through bridged cavities;
 - (4) Contingencies for safe recovery of personnel should a piece of equipment become entrapped shall be developed and reviewed with all personnel during annual retraining;
 - (5) The frequency of contact to be maintained with equipment operators during draw down activities;
 - (6) Information on how the operator will comply with the requirements of subsection 4 VAC 25-125-30 E.

- E. The following requirements will be met where mobile equipment operators work on stockpiles:
- (1) Beginning with the effective date of this regulation, all mobile equipment manually operated on coal stockpiles, where there is a potential of the equipment falling into a cavity, shall be equipped with an enclosed cab fitted with chemically tempered glass and a window support system. However, glass certified to withstand 40 psi may be installed without a window support system provided that such glass is installed in a frame that provides equal strength and support. Other types of glass and window frames or support system may be used provided that an equal or greater amount of protection is afforded.
 - (2) Mobile equipment shall be equipped with an enclosed cab and doors and windows shall be closed and secured at all times the equipment is in operation on the stockpile.
 - (3) The equipment cab shall be provided with two self-contained self-rescuers. Equipment operators shall be trained in the donning and use of self rescuers.
 - (4) The equipment operator shall be provided with a remote control device capable of stopping the flow of coal from the feeder and coal coming onto the stockpile. Such device shall be tested weekly.
 - (5) Emergency lighting shall be provided for the mobile equipment operator.
 - (6) Warning signs shall be posted at the entrances to all coal stockpiles with underlying coal feeders.
 - (7) Underground underlying feeders shall be equipped with gates so that material cannot inadvertently discharge when the feeder is not activated.
 - (8) When pushing material over the crest of a stockpile or draw hole, the equipment shall be stopped a safe distance from the edge and other material will be used to bump the material over such area.
 - (9) When underlying feeders are used, the location of each draw off point will be clearly indicated by a marker suspended directly above the underlying feeder.
 - (10) Visual indicators shall be provided to show the mobile equipment operators which feeders are being used.
 - (11) The equipment shall have a primary two-way communications system and a back-up communication system supplied by an independent power source.

4 VAC 25-125-40. Storage bins, bunkers, hoppers, and silos.

Storage bins, bunkers, hoppers, and silos where unconsolidated bulk materials are stored, handled or transported shall be equipped and maintained as follows:

- A. Equipped with mechanical devices or other effective means of handling materials so that during normal operations persons are not required to enter or work where they are exposed to entrapment by caving or sliding of materials.
- B. Equipped with supply and discharge operating controls. The controls shall be located so that spills or overruns will not endanger persons.
- C. Where persons are required to move around or over any storage bin, bunker, hopper, or silo where unconsolidated bulk material is stored, handled or transported, suitable walkways or passageways shall be provided.
- D. Where persons are required to enter any storage bin, bunker, hopper, or silo where unconsolidated bulk material is stored, handled or transported for maintenance or inspection purposes, ladders, platforms, or staging shall be provided. No person shall enter the facility until the supply and discharge of materials has ceased and the supply and discharge equipment is locked and tagged out. Persons entering the facility shall wear a safety belt or harness equipped with a lifeline suitably fastened. A second person, similarly equipped, shall be stationed near where the lifeline is fastened and shall constantly adjust it or keep it tight as needed, with minimum slack.